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REMARKSA. Request for Reconsideration

Applicants have carefully considered the matters raised by the Examiner in the outstanding Office Action but remain of the position that patentable subject matter is present. Applicants respectfully request reconsideration of the Examiner's position based on the amendments to the claim and the following remarks.

B. Claim Status and Amendments

Claims 15-17, 19 and 20 are presented for further prosecution.

Claim 16 has been amended to remove "fruit" and to clarify that the copper salts of caprylic amino acids are administered to the grape crops after flowering. The support to this amendment is understood from the specification as filed that the purpose of the treatment is to improve the sugar content of the fruit, which is generated after the flowering phase. The support is explicitly demonstrated in the table E of Declaration of the inventor DeMil filed on July 12, 2002, which shows the highest yield of sugar in the grapes under the treatment after flowering.

C. The Office Action

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Claims 15, 17 and 20 had been allowed. Claim 16 had been rejected as being anticipated by De Mil; Claim 19 had been rejected as being unpatentable over Morelle.

1. De Mil does not teach or suggest treating the grape crops after flowering

The Examiner had taken the position that De Mil broadly includes the treatment of the plant by using metal salt of lipoaminoacids.

De Mil requires, at col. 1, lines 41 - 45 and in claim 1, that "The present invention provides a means for increasing the floral fertility ... **consisting** of applying to the plants, during the period comprised between floral induction and the end of inflorescence,...". Consistent with the purpose of De Mil invention for floral fertility, the invention consists of the application of the lipoaminoacids during the period of inflorescence only. Hence, De Mil states at col. 3, lines 24-25: "this application **has to be made during inflorescence**, with well defined amounts by hectare and concentrations of the solutions or suspensions in water."

However, the present invention as in Claim 16 is to increase the sugar content of the grapes and the method of the

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present invention claims the treatment of the grape plants after the flowering period. As demonstrated in the table E of the declaration, the increasing of sugar content is highest when the grape plant was treated after the flowering period. The specification states a benefit of increasing the sugar content of grapes by 5%-10%. Seen from Table E, only the treatment after the flowering achieves an increasing of the sugar content of grapes more than 5%, compared with the control group's sugar content.

Claim 16 has been amended to recite the limitation of the treatment after flowering period. It is believed that amended claim 16 distinguishes the invention from De Mil which requires the treating of plants during flowering stage. Applicants therefore respectfully submit that amended claim 16 is not taught or suggested by De Mil.

2. Increasing the sugar content of grape by the treatment of copper salts of caprylic amino acids is an unexpected result

De Mil teaches a broad range of lipoaminoacids, or their derivatives, with 4 - 30 carbon atoms and any metal salification, for floral fertility. The method claimed in claim 16 specifically relates to the use of copper salts of caprylic

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amino acids, which is a specific metal salts of a 8 carbon atoms lipoaminoacids, for increasing the sugar content of grapes. Claim 16 is based on a discovery of the sugar content increasing effect resulting from the use of copper salts of caprylic amino acids.

The effect of sugar content increasing by copper salts of caprylic amino acids is unexpected. As demonstrated at table F of the Declaration of the inventor filed in 2002, copper salts of caprylic amino acids increases the sugar content of grapes, while copper salt of butyric amino acids decreases sugar content of the grapes.

Therefore, the present invention has discovered a specific species in a broad genus with a unexpected effect of increasing sugar content of grapes. It is therefore submitted that the broad disclosure in De Mil does not prevent the patentability of Claim 16 with the demonstrated unexpected result.

3. Morelle does not teach or suggest the specific amount of claim 19

The Examiner had maintained that C1) and C2) of Morelle teaches or suggests the method of claim 19. Applicants respectfully disagree.

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The examples of C1) and C2) in Morelle teach a composition with zinc butyric amino acids in the amount of 2 part in 600 - 700 parts of water in total. It is a composition with a concentration by weight around 0.27% - 0.3% with respect to water. Claim 19 recites a method of protecting the crop from animals by using 3-5 grams of a zinc salt of a butyric amino acid to 100-150 kilograms of **the crop**. There is no teaching or suggestion in Morelle for the specific amount of zinc salt of a butyric amino acid **with respect to the amount of the crop** to be protected. The composition concentration of zinc salt of a butyric amino acid in Morelle has nothing to do with the method of treated 100-150 kg crops by 3-5 g zinc salt of a butyric amino acid claimed in Claim 19.

Claim 19 is a method claim for protecting crops against animals. It would not be obvious based on the composition in Morelle to employ the claimed amount for this usage either, because Morelle does not teach using his composition to protect crops against animals. In fact, from the text of Morelle patent, nobody knows what is the benefit for those compositions.

Applicants therefore respectfully submit that claim 19 is not obvious based on Morelle because Morelle does not suggest

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the claimed amount and because Morelle does not suggest using the claimed compound to prevent animals from eating the crop.


D. Conclusion

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance and such action is respectfully requested. Should any extensions of time or fees be necessary in order to maintain this Application in pending condition, appropriate requests are hereby made and authorization is given to debit Account # 02-2275.

Respectfully submitted,

LUCAS & MERCANTI, LLP

By:


Donald C. Lucas, 31,275
Attorney for Applicant(s)
475 Park Avenue South, 15th Floor
New York, NY 10016
Tel. # 212-661-8000

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